PATENT APPLICATION

042390.P0744C2

Current form of claims

1. (Original) An apparatus comprising:

a machine readable storage medium having stored thereon instructions

capable of being executed by a data processing platform, said instructions

being adapted to:

receive a macroinstruction;

encode said literal source code macroinstruction into a corresponding

subroutine address;

generate an execution stream; and

store the subroutine address.

2. (Original) The apparatus of claim 1, wherein said instructions are further adapted to execute a subroutine identified by said subroutine address.

3. (Original) The apparatus of claim 2, wherein said instructions are further adapted to push an argument onto a stack, said argument adapted to be used as an input to said subroutine identified by said subroutine address.

4. (Original) The apparatus of claim 2, wherein said instructions are further adapted to pop an argument from a stack, said argument adapted to be used as an input to said subroutine identified by said subroutine address.

5. (Original) The apparatus of claim 2, wherein said instructions are further adapted to push a result of the execution of said subroutine onto a stack.

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6. (Original) The apparatus of claim 2, wherein said instructions are further adapted to point to the first item associated with said subroutine stored in said execution stream.

7. (Original) The apparatus of claim 1, wherein said instructions are further adapted to recursively execute a subroutine.

8. (Original) A method comprising:

receiving a source code command input stream comprising a macroinstruction;

encoding said macroinstruction into a corresponding subroutine address;

generating an execution stream for storing said subroutine address and associated arguments; and

executing a subroutine identified by said subroutine address.

9. (Original) The method of claim 8, and further comprising pushing an argument onto a stack, said argument representing an input to said subroutine identified by said subroutine address.

10. (Original) The method of claim 8, and further comprising popping an argument from a stack, said argument representing an input to said subroutine identified by said subroutine address.

11. (Original) The method of claim 8, and further comprising pushing a result of the execution of said subroutine onto a stack.

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12. (Original) The method of claim 8, and further comprising pointing to the first item associated with said subroutine stored in said execution stream.

13. (Original) An apparatus comprising:

a machine readable storage medium having stored thereon instructions capable of being executed by a data processing platform, said instructions being adapted to:

encode an instruction to provide a corresponding executable address.

14. (Original) The apparatus of claim 13, wherein said instructions are further adapted to receive the instruction.

15. (Original) The apparatus of claim 13, wherein said instructions are further adapted to generate an execution stream.

16. (Original) A method comprising:

translating a source code instruction to generate a subroutine address.

17. (Original) The method of claim 16, wherein translating the source code instruction includes directly translating the source code.

18. (Original) The method of claim 16, wherein translating the source code instruction includes translating the source code without generating an op code.

19. (Original) The method of claim 16, further comprising receiving the a source code instruction.

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20. (Original) The method of claim 16, wherein translating the source code instruction includes parsing the source code instruction.

21. (Original) The method of claim 16, further comprising generating an execution stream for storing said subroutine address.

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